

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

1. (currently amended) A process for preparing a cancer cell-transplanted non-human animal comprising: preparing a cell culture support coated on a surface with a polymer having a lower critical temperature for dissolution~~which changes its hydration force in a temperature range of 0-80°C, wherein the polymer is obtained by homo- or co-polymerization of one or more monomers selected from the group consisting of (meth)acrylamide compounds, N- (or N,N-di)alkyl-substituted (meth)acrylamide derivatives, and vinyl ether derivatives,~~ then cultivating cancer cells on the cell culture support in a temperature region wherein the polymer has weak hydration force, thereafter adjusting the culture solution to a temperature at which the polymer has a stronger hydration force, whereby the cultured cancer cells are detached in a sheet from the cell culture support without being treated with a proteolytic enzyme, and transplanting the detached cancer cells in sheet form to a specified site of a non-human animal.

Claim 2 (canceled).

3. (currently amended) The process for preparing a cancer cell-transplanted non-human animal according to claim 1, wherein the size of a sheet of cancer cells~~tissue of transplanted to~~ the non-human animal is controlled by changing the size of the sheet of cancer cells to be transplanted.

Claim 4 (canceled)

5. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 1, wherein a carrier is placed in contact over the cultured cells at the end of cultivation and the cells are detached intact together with the carrier.

6. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 1, wherein the cancer cells are of a transplantable cell line.

7. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 1, wherein the cancer cells are of an untransplantable cell line.

8. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 7, wherein the untransplantable cell line is MGT-40, MGT-90, CS-C9 or CS-C20.

9. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 1, wherein the cancer cells are collected from a living tissue.

10. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 1, wherein no more than 8×10^5 cells are transplanted.

11. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 1, wherein the polymer is poly(N-isopropylacrylamide).

12. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 1, wherein the non-human animal is a nude mouse, a rat, a mouse, a guinea pig, or a rabbit.

13. (previously presented) A cancer cell-transplanted non-human animal prepared by the process according to claim 1.

14. (currently amended) A method of selecting an anti-tumor agent comprising:
administering a test substance to a cancer cell-transplanted non-human animal
prepared according to claim 1, which has a tumor formed from the sheet of cancer cells,
and evaluating the effect of the administered selecting a test substance based on
increase or decrease in the ~~that reduces~~ volume and/or weight of the ~~the~~ [[a]] tumor-formed
~~from the sheet of cancer cells.~~

15. (previously presented) A cancer cell-transplanted non-human animal prepared by
the process according to claim 3.

16. (currently amended) A method of selecting an anti-tumor agent comprising:
administering a test substance to a cancer cell-transplanted non-human animal
prepared according to claim 3, which has a tumor formed from the sheet of cancer cells,
and evaluating the effect of the administered selecting a test substance based on
increase or decrease in the ~~that reduces~~ volume and/or weight of the ~~the~~ [[a]] tumor-formed
~~from the sheet of cancer cells.~~

Claims 17-20 (canceled)

21. (previously presented) The process for preparing a cancer cell-transplanted non-
human animal according to claim 1, wherein the cell culture support consists of a homo-
and/or co-polymer which changes its hydration force in a temperature range of 0-80°C.

22. (currently amended) A process for preparing a cancer cell-transplanted non-human
animal comprising:

- (a) preparing a cell culture support coated on a surface, wherein the cell culture
support is comprised of a polymer which shifts from a dehydrated state to a
hydrated state in the temperature range of 0-80°C, wherein the polymer is
obtained by polymerization of one or more monomers selected from the group
consisting of (meth)acrylamide compounds, N- (or N,N-di)alkyl-substituted
(meth)acrylamide derivatives, and vinyl ether derivatives;

- (b) cultivating cancer cells on the cell culture support at a temperature at which the polymer is dehydrated;
- (c) cooling the cell culture support to a temperature at which the polymer is hydrated, whereby a sheet of cancer cells is detached from the cell culture support without being treated with a proteolytic enzyme; and
- (d) transplanting the sheet of cancer cells to a specified site of a non-human animal.

23. (currently amended) The process for preparing a cancer cell-transplanted non-human animal according to claim 22, wherein the cell culture support consists of a homo- and/or co-polymer of the one or more monomers ~~which shifts from a dehydrated state to a hydrated state in the range of 0-80°C.~~

24. (previously presented) The process for preparing a cancer cell-transplanted non-human animal according to claim 22, wherein the polymer is poly(N-isopropylacrylamide).

25. (withdrawn) A cancer cell-transplanted non-human animal prepared by the process according to claim 22.

26. (previously presented) A method of selecting an anti-tumor agent comprising: administering a test substance to a cancer cell-transplanted non-human animal prepared according to claim 22 and selecting a test substance that reduces volume and/or weight of a tumor formed from the sheet of cancer cells.